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Customer Number

Patent
Case No.: 58907US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: DAVID B. OLSON

Application No.: 10/748,049

Group Art Unit: 1713

Filed: December 30, 2003

Examiner: Bernshteyn, Michael

Title: POLYMERIZABLE COMPOSITIONS FOR OPTICAL ARTICLES

37 CFR §1.132 DECLARATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, David B. Olson, state as follows:

1. I am a coinventor of the above-identified patent application and a coinventor of U.S. Patent No. 6,261,700.
2. I have reviewed the above-identified patent application including the claims, and the Office Action of August 30, 2006.
3. I have a BA degree in chemistry from St Olaf College, Northfield, MN. I have been employed by 3M Company, St. Paul, Minnesota from 1978 to the present, working in various areas of research and development. I am a Division Scientist, and a corporate expert in preparing and using polymerizable resins for manufacturing optical articles.
4. As described in the paragraph beginning on p. 11, line 16 and demonstrated in the examples on p. 13, line 27 to p. 15, the brightness enhancing films of the invention were prepared by depositing a polymerizable composition on a molding surface in order to fill the (i.e. prismatic) cavities of the molding surface and curing the polymerizable

composition between a preformed substrate (such as a PET film) and the molding surface.

5. When the brightness enhancing film is prepared by curing the polymerizable composition between a preformed substrate (e.g. PET film) and the molding surface, any solvent within the polymerizable resin would be trapped between the preformed substrate (e.g. PET film) and tool during curing. The presence of solvent in the polymerizable resin would thus create the following problems. First of all, solvent would negatively impact the polymerization of the resin, which would impede the formation of the microreplicated optical film and the adhesion of the cured acrylate resin to the PET film. Second, the optical quality of the film would be significantly impacted. Many optical defects would be created by trapped or escaping solvents, making the film essentially useless as a precision optical article. Thirdly, attempting to cure the polymerizable resin with solvent present could be a safety hazard, since the ultraviolet energy employed to cure the polymerizable resin could ignite a flammable solvent. For these reasons, a back-to-back comparison of a brightness enhancing film having prisms prepared from a polymerizable composition having solvent cannot be made to compare to the exemplified brightness enhancing film.

6. All statements made of my own knowledge are true and all statements made on information and belief are believed to be true. I acknowledge that willful false statements are punishable by fine, imprisonment or both and may jeopardize the validity of the application or any patent issuing thereon.



David B. Olson

Subscribed and sworn to before me

this 16th day of November, 2006.



Notary Public

